

**REMARKS**

The Office Action dated August 23, 2005, has been received and carefully considered. Claims 1-22 are pending in the present application. Reconsideration of the outstanding objections/rejections in the present application is respectfully requested based on the following remarks.

At the outset, Applicants note with appreciation the indication on page 3 of the Office Action that claims 7-22 are allowed. Applicants note with equal appreciation the indication on page 3 of the Office Action that claims 2-4 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, Applicants have opted to defer rewriting the above-identified claims in independent form pending reconsideration of the arguments presented below with respect to the rejected claims.

I. THE ANTICIPATION REJECTION OF CLAIMS 1, 5, AND 6

On pages 2-3 of the Office Action, claims 1, 5, and 6 were rejected under 35 U.S.C. § 102(e) as being anticipated by Groe (U.S. Patent No. 6,795,843). This rejection is hereby respectfully traversed.

Under 35 U.S.C. § 102, the Patent Office bears the burden of presenting at least a prima facie case of anticipation. In re Sun, 31 USPQ2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. Id.. "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. International Trade Commission, 808 F.2d 1471, 1479, 1 USPQ2d 1241, 1245 (Fed. Cir. 1986), cert. denied, 482 U.S. 909 (1987). That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 533, 226 USPQ 619, 621 (Fed. Cir. 1985). "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his own knowledge to make the claimed invention." Id..

Regarding claim 1, the Examiner asserts that Groe discloses a circuit (Figure 10) comprising: a differential amplifier (1002) for receiving a differential input signal (Vin) and generating a differential output signal (Vout); an integrator (1006) operable as a comparator for generating an adjustment signal (control signal) based at least in part upon the differential output signal (Vout); and a control circuit (1008)

operable as a current controller for controlling current steering and at least one offset current in the differential amplifier (1002) based at least in part upon the adjustment signal (control signal) and a current steering control signal, as claimed.

However, it is respectfully submitted that Groe fails to disclose, or even suggest, a comparator for generating an adjustment signal based at least in part upon the differential output signal, as claimed. Specifically, Groe explicitly teaches an integrator (1006) to provide a control signal based upon the mean value of the output waveform of the differential circuit (1002) (see column 2, lines 47-52). Indeed, the integrator (1006) is required because the output waveform of the differential circuit (1002) must be integrated over time to obtain its mean value. In contrast, claim 1 recites a comparator for generating an adjustment signal based at least in part upon the differential output signal. Such a comparator allows for a single point comparison, in contrast to the integrator (1006) of Groe which performs a mean integration function over time. Additionally, Groe only discloses that the integrator (1006) of Groe performs a mean integration function over time, and does not disclose, or even suggest, that it may be used for a single point comparison function.

It is also respectfully submitted that Groe fails to disclose, or even suggest, a current controller for controlling current steering and at least one offset current in the differential amplifier based at least in part upon the adjustment signal and a current steering control signal, as claimed. Specifically, Groe does not disclose, or even suggest, controlling current steering and/or at least one offset current in the differential amplifier (1002). Rather, Groe only discloses that the feedback circuit (1004), comprising the integrator (1006) and the control circuit (1008), separate input and output imbalances and adjust each accordingly. This clearly does not disclose, or even suggest, controlling current steering and at least one offset current in the differential amplifier, as claimed. Additionally, Groe only discloses a single input (i.e., the control signal) to its control circuit (1008). This clearly does not disclose, or even suggest, controlling current steering and at least one offset current in the differential amplifier based at least in part upon the adjustment signal and a current steering control signal, as claimed.

Thus, it is respectfully submitted that Groe, either alone or in combination with the other cited references, fails to teach, or even suggest, the claimed invention. Accordingly, it is respectfully submitted that claim 1 should be allowable.

Claims 5 and 6 are dependent upon independent claim 1. Thus, since independent claim 1 should be allowable as discussed above, claims 5 and 6 should also be allowable at least by virtue of their dependency on independent claim 1. Moreover, these claims recite additional features which are not disclosed, or even suggested, by the cited references taken either alone or in combination. For example, claim 5 recites that the differential output signal comprises complementary positive and negative output signal components, and the comparator compares the difference between the positive and negative output signal components. For the reasons set forth above with respect to claim 1, Groe fails to disclose, or even suggest, comparing output signals, but instead discloses integrating output signals. Accordingly, claim 3 should be allowable and acknowledgment of same is respectfully requested. Also, claim 6 recites that the differential input signal is a differential multi-PAM input signal. The Examiner asserts that such is inherent, without any support for this assertion. As stated in MPEP § 2131, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Also, as stated in MPEP § 2112, "In

relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). Thus, Applicants respectfully request the Examiner to provide a reference to support this assertion.

In view of the foregoing, it is respectfully requested that the aforementioned anticipation rejection of claims 1, 5, and 6 be withdrawn.

## II. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the

present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

Respectfully submitted,

Hunton & Williams LLP

By: 

Thomas E. Anderson

Registration No. 37,063

TEA/vrp

Hunton & Williams LLP  
1900 K Street, N.W.  
Washington, D.C. 20006-1109  
Telephone: (202) 955-1500  
Facsimile: (202) 778-2201

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